

Free Mount Cylinder: Non-rotating Rod Type

Double Acting, Double Rod

Series *CUKW*

ø6, ø10, ø16, ø20, ø25, ø32

How to Order

CUKW 6 - 30 D

With auto switch **CDUKW 6 - 30 D - M9BW**

Built-in magnet

Non-rotating rod type

Double rod

Bore size

6	6 mm
10	10 mm
16	16 mm
20	20 mm
25	25 mm
32	32 mm

Port thread type

Symbol	Type	Bore size
Nil	M5 x 0.8	ø6, ø10, ø16, ø20, ø25
	Rc 1/8	ø32
TN	NPT 1/8	ø32
TF	G 1/8	ø32

Number of auto switches

Nil	2 pcs.
S	1 pc.

Auto switch

Nil	Without auto switch
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* Refer to the table below for applicable auto switches.

Action

D	Double acting
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Standard stroke (mm)

ø6, ø10, ø16	5, 10, 15, 20, 25, 30, 40, 50, 60
ø20, ø25, ø32	5, 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example): CDUKW20-25D

Applicable Auto Switches/Refer to pages 1263 to 1371 for further information on auto switches.

Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Load voltage		Auto switch model		Lead wire length (m)				Pre-wired connector	Applicable load		
					DC	AC	Perpendicular	In-line	0.5 (Nil)	1 (M)	3 (L)	5 (Z)				
Solid state switch	—	Grommet	Yes	3-wire (NPN)	24 V	5 V, 12 V	—	M9NV	M9N	●	●	●	○	○	IC circuit	Relay, PLC
	3-wire (PNP)			12 V		M9PV		M9P	●	●	●	○	○			
	2-wire			5 V, 12 V		M9BV		M9B	●	●	●	○	○	IC circuit		
	3-wire (NPN)			12 V		M9NWV		M9NW	●	●	●	○	○			
	3-wire (PNP)			24 V	100 V	M9PWV		M9PW	●	●	●	○	○	IC circuit		
	2-wire				100 V or less	M9BWV		M9BW	●	●	●	○	○			
Reed switch	—	Grommet	Yes	3-wire (NPN equivalent)	—	5V	—	A96V	A96	●	—	●	—	—	IC circuit	—
			No	2-wire	24 V	12 V	100 V	A93V	A93	●	—	●	—	—	—	—

* Lead wire length symbols: 0.5 m Nil (Example) M9NW
 1 m M (Example) M9NWM
 3 m L (Example) M9NWL
 5 m Z (Example) M9NWZ

* Solid state auto switches marked with "○" are produced upon receipt of order.

* Since there are applicable auto switches other than the above, refer to page 538 for details.

* For detail about auto switches with pre-wired connector, refer to pages 1328 to 1329.

* Auto switches are shipped together but not assembled.

Free Mount Cylinder: Non-rotating Rod Type **Series CUKW**



Specifications

Bore size (mm)	6	10	16	20	25	32
Fluid	Air					
Proof pressure	1.05 MPa					
Maximum operating pressure	0.7 MPa					
Minimum operating pressure	0.18 MPa	0.13 MPa		0.11 MPa		
Ambient and fluid temperature	Without auto switch: -10 to 70°C (No freezing) With auto switch: -10 to 60°C (No freezing)					
Lubrication	Non-lube					
Piston speed	50 to 500 mm/s					
Cushion	Rubber bumper					
Rod end thread	Male thread					
Stroke length tolerance	+1.0 0 mm					
Rod non-rotating accuracy <small>(Note)</small>	±0.8°				±0.5°	

Note) No load: Rod in the non-rotating plate side at retracted

Standard Stroke

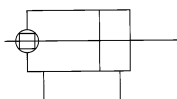
Bore size (mm)	Standard stroke (mm)
6, 10, 16	5, 10, 15, 20, 25, 30, 40, 50, 60
20, 25, 32	5, 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100

Minimum Stroke for Auto Switch Mounting

(mm)

No. of auto switches mounted	Applicable auto switch		
	D-A9□, D-A9□V	D-M9□, D-M9□V	D-M9□W, D-M9□WV
1 pc.	5	5	5
2 pcs.	10	5	10

JIS Symbol
Non-rotating rod



Mass/(): Denotes the values with D-A93.

(g)

Model	Stroke (mm)												
	5	10	15	20	25	30	40	50	60	70	80	90	100
C(D)UKW6-□D	33 (38)	36 (46)	40 (50)	43 (53)	46 (56)	50 (60)	57 (67)	64 (74)	71 (81)	—	—	—	—
C(D)UKW10-□D	51 (56)	56 (66)	60 (70)	65 (75)	69 (79)	74 (84)	83 (93)	92 (102)	101 (111)	—	—	—	—
C(D)UKW16-□D	84 (109)	91 (121)	98 (128)	105 (135)	112 (142)	119 (149)	133 (163)	147 (177)	161 (191)	—	—	—	—
C(D)UKW20-□D	150 (185)	163 (203)	177 (217)	191 (231)	205 (245)	219 (259)	247 (286)	275 (315)	303 (343)	331 (371)	359 (399)	387 (427)	415 (455)
C(D)UKW25-□D	276 (330)	296 (355)	316 (375)	336 (395)	357 (416)	377 (436)	421 (476)	462 (516)	500 (559)	541 (600)	582 (641)	623 (682)	664 (723)
C(D)UKW32-□D	434 (507)	465 (543)	495 (573)	526 (604)	556 (634)	587 (665)	669 (747)	709 (787)	770 (848)	831 (909)	892 (970)	953 (1031)	1014 (1092)

* For the auto switch mass, refer to page 1263.

Theoretical Output

Specifications are the same as double acting, double rod (Series CUW). Refer to page 491.

Tightening Torque

When mounting Series CUKW, refer to page 484.

Allowable Rotational Torque

Ensure that rotational torque is not applied to the piston rod of Series CUKW. If rotational torque is applied unavoidably, refer to page 503.

Auto Switch Mounting Position

For the auto switch mounting position of Series CUKW, refer to page 494, since specifications are the same as double acting, double rod type.

CUJ

CU

CQS

CQ2

RQ

CQM

MU

D-□

-X□

Individual

-X□

Technical data